Bracket Separated Values (bsv)

Summary of Concept:

A reliable way to describe tabular data structures in a plain text file.

Key of Concepts:

1. Data values are separated by a separator consisting of two characters.
2. Data is caged: meaning the separator comes before the first data value and trails the last data value.
3. There are no escape characters

Formatting Options:

Since the data is caged by a 2 character separator applications can determine the level by reading the first 2 characters of the data file.

1. Level 1: List or Table without header
   1. Identify column separator. Default=][
   2. The row separator is 2 consecutive column separators. Default= ][][
2. Level 2: Table without header
   1. Identify column separator. Default=][
   2. Identify a different row separator. Default=)(
3. Level 3: Table with header
   1. Identify column separator. Default=][
   2. Identify a different separator for rows. Default=)(
   3. Identify a different separator for the header. Default=}{
      1. Note the Header only cages the header values, it does not cage the entire data set.

Other Considerations:

Application developers should allow for the default separators to be substituted if it is absolutely necessary to have one or more of the default separators included as part of a data value.

By relying on two characters as the separator, the data can handle using either one of the characters by itself. This improves when the characters are different and unlikely to appear next to each other.

By avoiding commas and quotation marks, other data structures such as csv, tab delimited, xml and json can be comfortably nested within bsv.

Examples:

Level 1:

][Hello][World][][Good-Bye][CSV][

Level 2:

)(][Hello][World][)()(][Good-bye][CSV][)(

Level 3:

}{Column 1}{Column 2}{)(][Hello][World][)(Good-by][CSV][)(